## Office of Water News Clips - January 27, 2014

## Inside City's Water Tanks, Layers of Neglect

Outlet: New York Times - Online, The

With their quaint barrel-like contours and weathered cedar-plank sides, rooftop water towers are a constant on the New York City skyline. And though they may look like relics of a past age, millions of residents get their drinking water from the tanks every day.

But inside these rustic-looking vessels, there are often thick layers of muddy sediment. Many have not been cleaned or inspected in years. And regulations governing water tanks are rarely enforced, an examination by The New York Times shows.

Even some that are routinely maintained contain E. coli, a bacterium that is used by public health officials to predict the presence of viruses, bacteria and parasites that can cause disease.

When found in drinking water, E. coli, a microbe carried in the feces of mammals and birds, requires the issuance of a boil-water order, according to federal Environmental Protection Agency regulations.

Samplings taken by The New York Times from water towers at 12 buildings in Manhattan, Queens and Brooklyn found E. coli in five tanks, and coliform in those tanks and three more. Coliform by itself is not harmful, but does indicate that conditions are ripe for the growth of potentially dangerous microorganisms. The positive results all came from the bottoms of the tanks, below the pipe that feeds the buildings' taps, though public health experts say the contamination is still a concern because the water circulates throughout the inside of the tanks.

One expert The Times consulted, Dr. Stephen C. Edberg, a public-health microbiologist at Yale University who invented the now-standard test for bacterial contamination in drinking water, was so alarmed by the results that he immediately alerted the New York City Department of Health and Mental Hygiene. The department has oversight over the tanks.

"Fecal contamination means that the towers are subject to animal intrusion, almost certainly birds and potentially animals such as squirrels," Dr. Edberg wrote in an email to the department, adding, "Clearly, these units are not sealed to the outside."

City health officials insist that the tanks are safe, and that the laws governing them are adequate. The city's 311 help line gets dozens of calls each year from residents saying they have become ill from drinking water, but health officials say no cases have ever been traced back to a water tank.

That does not mean people are not getting sick, Dr. Edberg said.

"It's very hard, with a population as large and dense as New York, to even ascertain even reasonably large illness outbreaks," he said. "You'd literally have to have entire apartment buildings getting sick at the same time."

The thousands of tanks that dot the skyline are part of a water system that originates at 19 protected lakes and reservoirs in upstate New York. City officials like to boast that the system provides the finest tap water of any city in the world.

But the vast system of safeguards protecting the water supply virtually ends at the curb. From that point on, it is up to building owners to ensure that their tanks are cleaned, inspected and tested for bacteria annually, as required by the city's building and health codes.

The city's own surveys suggest that nearly 60 percent of the owners do not comply. And the city has done little to make them.

Water tanks came into widespread use in the late 1800s, as the city's water mains were unable to keep up with the requirements of ever-taller buildings.

Even today, the mains provide only enough pressure to deliver water to the sixth floor of most buildings. Taller buildings use electric pumps to carry water to a spout at the top of the water tanks, letting gravity do the rest. An exit pipe about midway down distributes drinking water to the building, while another pipe near the bottom is used for sprinkler systems and firefighting.

Yet as vital as these vessels are to the city's water supply, oversight is virtually nonexistent.

Building owners are not required to submit proof to the city that cleanings and inspections have been conducted, as they do for elevator and boiler inspections. Until recently, they did not have to provide evidence of the inspections to their tenants.

City health and buildings officials cannot even say for sure how many water tanks are in use. Estimates range from 12,000 to 17,000, based on the inventory of buildings that stand seven stories or taller.

Asked if neglecting to clean and inspect the tanks could have negative health consequences, Dan Kass, the health department's deputy commissioner for environmental health, said, "We don't have any evidence that there is."

During a 2009 City Council hearing, a department official said that the city had other ways to keep tabs on water quality, by taking samples from taps all over the city every month, as well as monitoring hospital visits and medication sales for signs of outbreaks. The official said in cases where the department receives a complaint about water quality, the water was found to be safe 99 percent of the time.

Another potential concern is the use of an epoxy called Sea Goin' Poxy Putty, which is not approved for use in drinking water, a violation of the city's health code. The epoxy, a bisphenol A-based polymer formulated in the 1950s to repair ship hulls underwater, is used to caulk leaks in the wood tanks.

At least two of the three companies that dominate the tank installation business use the epoxy. Andrew Rosenwach, president of one of the companies, Rosenwach Tank, said that the company uses the epoxy because it works on damp surfaces.

"If the health department tells us to stop using it, we'll stop using it," Mr. Rosenwach said. "And we'll be replacing tanks left and right, which is O.K. with us."

The department said that it would investigate if someone reported the epoxy's use in a specific water tank. Whether it would require the epoxy to be removed "would be determined on a case-by-case basis," it said in a statement.

The department also said that it did not necessarily matter that the epoxy was not certified for drinking water. "Most epoxy curing agents become inert once cured, and would not be expected to impact water quality," it said.

The superintendent of one Queens building became concerned about its water supply a few years ago. The rooftop tank was about eight years old at the time and had never been cleaned.

When he opened the hatch under the tank's conical roof, he found pigeon droppings in the crawl space between the roof and the tank cover. Sunlight shot through cracks between the roof's slatted planks. The water inside looked impenetrable and brown.

The super, who spoke on the condition of anonymity to protect his job, said that he complained, but the property manager said the tank was fine.

Not satisfied, the super called 311, where an operator referred him to the health department. But, the super said, no one from the department returned his call.

The super drained the tank himself and found thick layers of muck at the bottom that he could not flush out because the drain nipple was too high. "The mud smelled so foul," he said. "I poured Clorox in and kept flushing it out, but I couldn't get it all out."

One day he found a pigeon bone in the strainer of a resident's kitchen faucet. Finally, the building's coop board agreed to have the tank professionally cleaned. A water sample taken by The Times just before a more recent cleaning tested positive for coliform and E. coli.

Tank cleaning companies have an inventory of stories about finding dead birds, mice and animal droppings. One cleaner discovered a homeless person living in the attic space between a tank cover and the roof.

The Times took samples from 14 drinking water tanks in 12 buildings. Samples from eight of the tanks came back with positive results for total coliform. Five of those also came back positive for E. coli. A positive result for either sample means that the water is not fit for human consumption, according to state and federal standards.

In each of the instances, the tanks were cleaned after the sampling and retested by cleaning companies, which then reported negative results.

Each sample was taken near the bottom of the tank — where sediment builds up and bacteria and viruses are more likely to thrive — but below the spigot that feeds the buildings' faucets.

Still, Dr. Edberg said, "The problem is that if any part of the tank gets contaminated, all of it is contaminated."

The health department said the methodology used and the conclusions drawn by The Times were flawed. The department said The Times had used non-sterilized equipment and had not followed suggested testing protocols. But with the exception of three of the positive samples, in which The Times took the sample during the cleaning, The Times followed the protocols exactly as recommended.

In 1995, Steve Sanders, then a state assemblyman who represented Manhattan's East Side, became concerned after maintenance workers at Stuyvesant Town-Peter Cooper Village, the sprawling middle-class apartment complex, told him of deplorable conditions in the complex's water tanks.

"They told me stories about workers swimming in them in the summer, and about pigeon excrement," Mr. Sanders recalled.

The city code at the time prevented him from viewing the complex's inspection records, but Mayor Rudolph W. Giuliani ordered the health department to investigate. The department took water samples and checked the inspection records of 248 randomly chosen buildings.

About 3 percent showed levels of coliform bacteria (the study did not test for E. coli). And about 35 percent of the building landlords could not provide proof of inspection.

The results satisfied health officials that a more proactive monitoring system was not needed.

"We were never satisfied," said Steve Kaufman, who was Mr. Sanders's chief of staff at the time.

In 2009, at the urging of Mr. Kaufman, Daniel Garodnick, a city councilman who lives in Stuyvesant Town, sponsored legislation that would require the health department to track water tank inspections through a database.

The health department called the measure unnecessary and too expensive. Christopher Boyd, the director of the department's Office of Public Health Engineering, told the Council the database would cost \$300,000 to set up and \$65,000 a year to maintain.

The Council decided against the database, but passed a bill mandating, for the first time, that building owners make inspection records available to tenants, and to post proof of the inspections in prominent places. It also, for the first time, required that tank water be tested for contamination once a year. The new law required the health department to conduct three surveys, checking the inspection records of 100 randomly chosen buildings each year from 2010 through 2012.

The results were not encouraging. No more than 42 percent of the buildings surveyed each year could provide proof of a bacteriological test. Of those buildings that could provide proof, all were found to be free of contamination, though the samplings were typically done after the tanks were cleaned, which is allowed. But even among these buildings, most failed to post their inspection notices, and most could not provide proof that they had performed an inspection in each of the previous five years, as city law

also requires.

More than \$700,000 in fines was levied against the buildings in the survey. Despite the findings, the health department said it had no plans to expand enforcement of the laws, though it said it would continue to do annual surveys.

"The department continues to monitor compliance with the regulation and improve compliance by consulting with building owners regarding the requirements, through Realtor associations and building management companies," the department said in a statement.

## POLITICS: W.Va. spill turns regulation fighter Manchin into crusader for chemical oversight

#### **Outlet: Greenwire**

Within days of the Jan. 9 chemical spill that left 300,000 West Virginians without water, Sen. Joe Manchin was talking about what the government should do to make sure that wouldn't happen in his state again.

The Elk River spill exposed "laws that need to be changed," the Democrat said after he returned to Washington from West Virginia to start writing a bill that would toughen the regulation of chemical storage facilities near water supplies. He also said the spill should spur reform of the Toxic Substances Control Act of 1976 to give U.S. EPA more power to test and regulate chemicals in commerce.

Yesterday, Manchin called for the Freedom Industries plant where the leak of 4-methylcyclohexane methanol (MCHM) occurred to be razed.

"The first step to restoring confidence in our water system and ensuring West Virginians that their water is safe is to tear down Freedom Industry's facility and completely remediate the site," he said. "We need to start from scratch."

Those aren't exactly the usual talking points from a politician known for fighting off the Obama administration's environmental initiatives, mainly to protect his state's coal industry.

Manchin's chemical storage regulation bill -- which he will introduce next week with fellow West Virginia Sen. Jay Rockefeller (D) and Environment and Public Works Chairwoman Barbara Boxer (D-Calif.) -- would set minimum standards for states to establish regulations on aboveground storage facilities near drinking water.

His measure is one of several introduced nationally and in West Virginia to increase enforcement of chemical storage and help states clean up after a spill. Manchin has said all are necessary.

But he's been reluctant to come down on the coal industry, where he says he'd prefer to see regulators keep their hands off. Environmentalists in his state see the chemical spill and mine discharges as part of the same water-fouling problem. The chemical spilled, they point out, is used by mining companies to

clean up coal.

Bo Webb, a prominent opponent of mountaintop-removal coal mining, said he finds it interesting that Manchin is quick to call for more regulation of chemicals but finds increased oversight of coal mining an anathema.

"I think that he got put in a position that he had to do something, and this was a convenient thing to do to deflect it from coal," Webb said in an interview. "There couldn't be anything further from the truth."

MCHM is used by the coal industry in a process that often yields slurry ponds filled with billions of gallons of waste. Environmentalists have for years been fighting with companies and regulators about whether those waste ponds are secure.

"People need to understand the severe danger that these things pose, that these chemicals pose to everyone," Webb said. "So there's a real toxic catastrophe waiting to happen here in West Virginia."

Even though the chemicals industry has a significant footprint in West Virginia, the coal industry remains larger and more prominent. State employment records show that chemicals companies employ more than 10,000 West Virginians, about half of coal's total workforce.

Manchin has bucked the coal industry before. He has consistently supported new mine safety legislation in the wake of the 2010 Upper Big Branch explosion that killed 29 West Virginia miners. The mining lobby maintains a new law is not needed.

And last year Manchin, who portrays himself as a common-sense lawmaker who seeks common ground, took on the National Rifle Association by supporting some gun control measures. The group promptly retaliated.

Helping him now is a chemicals industry that's not opposing new regulation. "When an incident occurs, we don't like it, either. We drink the water as well," said Kevin DiGregorio, executive director of the Chemical Alliance Zone Inc., a West Virginia industry group.

DiGregorio recalls how the petrochemicals industry started in West Virginia with Union Carbide and the first commercial ethylene plant. Chemicals now rank somewhere between sixth and 10th in terms of state gross domestic product.

"We want to be a positive force and be proactive," DiGregorio said in an interview. "We try to do things right."

At the national level, the American Chemistry Council has backed TSCA reform (albeit in a bill that the left has criticized for not doing enough). In a statement, the trade group said it was examining options with lawmakers and regulators for enhanced safety measures.

Last April's explosion at a fertilizer plant that killed 15 people and injured 160 in West, Texas, brought new attention to the outdated security laws, and industry groups have been involved in discussing solutions giving federal agencies more oversight.

Although industry groups may not be backing the strongest regulatory solutions, observers said the fact that they are at least using rhetoric on reform gives lawmakers room to work.

The West Virginia spill was not Manchin's first foray into TSCA reform -- in fact, he's credited with bringing Sens. David Vitter (R-La.) and the late Frank Lautenberg (D-N.J.) together to work on a bipartisan bill, and he's testified in favor of the reform effort. The bill is currently being reworked to try to address concerns from Democrats and green groups that it is too weak and would not protect stronger state laws.

Manchin's role as a peacemaker in the initial TSCA talks, which moved Lautenberg away from the more liberal "Safe Chemicals Act" that industry opposed, may have also given him a longer leash with industry. One public health lobbyist who requested anonymity said the deal was "such a technical coup" that Manchin likely had some cover with industry groups.

"Manchin can also be made comfortable that there are some other Democrats to his left on this," the lobbyist said, referring to both the security bill and TSCA.

In a statement, the American Chemistry Council said it has a "long-standing working relationship" with Manchin.

"We fully support efforts by Senator Manchin and others to gather the facts and address concerns raised by the unfortunate events in West Virginia," ACC said. "We hope to work with Senator Manchin to address several concerns with the legislation he plans to introduce, based on the information currently available about it."

The group didn't discuss its concerns with the bill, of which legislative text has not been released.

Environmentalists, who spoke on background for this story, have problems with the TSCA legislation as written and question whether his legislation to address the recent spill will have teeth. They wonder whether the bill will be a sincere regulatory step or an effort to appease West Virginia residents calling for change while at the same time protecting the chemicals industry.

For example, it's unclear whether the legislation will give EPA the authority to intervene in state regulatory decisions. A one-page fact sheet distributed by the sponsors does not mention any EPA oversight of the security plans, and the offices of the sponsor did not respond to requests for clarification. They take solace, however, in Boxer's involvement.

Manchin has gotten strong support from ACC in the past. His 2010 Senate campaign netted a \$5,000 donation from the lobbying group's PAC, and the group has given him \$11,000 this cycle, when he is not facing a campaign.

The group ran television ads this summer praising him for his "leadership on issues that encourage strong domestic energy policy, support small businesses and promote rational, science-based chemical regulation," part of a series of ads for several Capitol Hill allies.

Still, that support pales to what Manchin has brought in from the powerful coal lobby. According to data from the Center for Responsive Politics, the mining industry has been Manchin's second-biggest supporter (behind lawyers) with \$667,548 in donations this cycle alone.

West Virginia's House delegation, meanwhile, has not sought out regulations with the same gusto -- neither Democrat Nick Rahall nor Republicans Shelley Moore Capito and David McKinley have talked about enhancing security regulations. Capito told E&E Daily she believes in "good regulations and enforcement of regulations, but not overregulation".

The anti-regulatory sentiment in the House -- Speaker John Boehner (R-Ohio) even said in the days after the West Virginia spill the problem did not lie with lax regulations but rather lax regulators -- likely means the security reform could stall if it passes the Senate.

In response to questions about Boehner's views, Manchin told The Huffington Post: "It didn't happen in Ohio, right?"

# 'Green' modifications proposed to D.C. clean-water plan; environmentalists are skeptical

# **Outlet: Washington Post - Online**

The streetscapes of several Northwest Washington neighborhoods could be dramatically transformed under a D.C. Water proposal to deploy "green infrastructure" to prevent sewage overflows into the Potomac River.

The \$100 million proposal, unveiled this week by the water and sewer utility, would modify a 2005 courtenforced mandate to build a system of tunnels to store tens of millions of gallons of stormwater and raw sewage that would otherwise be discharged into the city's waterways during rainy weather.

D.C. Water officials say building such features as cisterns, rain gardens and permeable alleys would keep enough runoff out of the sewer system to reduce the need for storage tunnels. The utility wants to abandon plans to build one tunnel — underneath Piney Branch, a Rock Creek tributary — and scale back a tunnel planned for the Georgetown waterfront. The largest tunnel, mainly along the edge of the Anacostia River, is under construction.

The overall plan, known as the Clean Rivers Project, is estimated to cost \$2.6 billion with or without the substitution of green infrastructure. The latest proposal comes after more than three years of planning that has included talks with the District and federal governments.

Changing the 2005 consent decree that mandates the storage tunnels will mean convincing the Environmental Protection Agency and the Justice Department that the new initiatives will be as effective as the tunnels. Mayor Vincent C. Gray (D) and his city administrator, Allen Y. Lew, who is also chairman of the D.C. Water board, are strong backers.

George S. Hawkins, D.C. Water's general manager and the leading proponent of the changes, said green

infrastructure features have been adjusted to provide the same clean-water benefits as the courtapproved plan while easing anticipated water-bill hikes, creating jobs and generating additional environmental improvements.

"We've been fairly clear that we're not trying to avoid or duck things," Hawkins said, referring to the clean-water standards in the court agreement. "This doesn't change the total cost, but it does add a little bit of breathing room for how our ratepayers get hit and when."

Under the current plan, D.C. Water estimates that the average annual household bill would increase to \$1,675 by 2032. If the proposed changes are accepted, the amount would drop to about \$1,200.

But environmental advocates have been deeply skeptical of changes to the court agreement, arguing that further delays to the 20-year plan are unacceptable and that green infrastructure has not been proved to be as effective as tunneling.

Anxiety was heightened in 2012, when Gray fired his then-environmental director after the director expressed concerns to federal authorities about an earlier version of the green-infrastructure plan without clearing it with Lew.

Environmental lawyer Jennifer C. Chavez said Thursday that she had "serious concerns" about the D.C. Water plan, particularly a proposed seven-year extension to the court agreement.

"Every year that we accept raw sewage being dumped into the water of our nation's capital is completely unacceptable," said Chavez, a staff attorney for Earthjustice, a nonprofit law organization that represents several local environmental and community groups in a related lawsuit. "I know the time frames are long, but every year people get sick."

The water-retention projects envisioned in the latest proposal would be constructed mainly on public property, Hawkins said, though some utility funds could be spent to provide incentives for allowing projects on private property.

The projects would be focused on two areas: the Georgetown, Burleith and Glover Park neighborhoods, whose sewers overflow directly into the Potomac; and Columbia Heights, Petworth, Brightwood and other neighborhoods whose sewage overflows empty into Piney Branch.

## Howard watershed 'academy' seeks recruits to carry message of bay protection

#### Outlet: Baltimore Sun - Online

By training residents to be savvy environmental leaders who can inspire their neighbors to take action, a nonprofit organization hopes to reduce the flow of polluted stormwater runoff that eventually empties into the Chesapeake Bay.

The Howard County Watershed Stewards Academy which just graduated its first class two months ago is

recruiting for a second class of volunteers interested in learning how to improve the water quality of local streams and rivers, which ultimately impacts the bay's health.

"Slow the flow" is the popular mantra among those who are passionate about helping people understand the positive impact they can have on the bay, said Sylvia Huestis, a master watershed steward and member of the nonprofit's advisory committee.

And there is a lot of water flowing into the Chesapeake. Approximately 51 billion gallons empty into the bay each day from its freshwater tributaries, according to the group's website.

There are currently eight stewards in the county, and organizers are hoping to more than triple that number starting Feb. 7, when a 15-session intensive course begins. Applications, which can be completed online at howardwsa.org, are due Jan. 28.

The Howard County group joins other watershed stewards academies in the area one in Anne Arundel County, on which Howard's is modeled, and another that covers Montgomery and Prince George's counties and Washington.

Training enables certified stewards to teach other residents how to protect the county's watersheds, which are areas of land that drain into specific bodies of water.

Designing rain gardens to absorb and filter groundwater is one example of a homeowner project that can help keep runoff and the chemicals, nutrients and pollutants it contains out of local rivers and streams.

Such measures are not new to the county. The Columbia Association began applying best management practices to its 20 sub-watersheds after the Columbia Watershed Management Plan was completed in 2009.

What is new is the establishment of an organization dedicated solely to educating residents who can pass on what they learn to their communities, Huestis said.

"One of the things that has made watershed work difficult is that there is no volunteer group dedicated to our specific watersheds," said Huestis, who is 70 and a retired Howard County science teacher.

Patapsco Heritage Greenway volunteers are known in the area for holding frequent stream cleanups and designing other projects to preserve and protect the Patapsco Valley, she said. But the valley lies mostly in Baltimore County, so much of Howard isn't under the group's jurisdiction, she noted.

Howard's advisory committee members are especially excited about the benefits that disseminating knowledge will bring to protecting the watersheds of the Middle Patuxent, Little Patuxent and Patapsco rivers.

The Howard County academy works side by side with the Columbia Association's watershed manager, John McCoy, and consults with the county's Office of Environmental Sustainability. The county awarded the group a \$10,000 grant for fiscal year 2014 that will cover costs of in-the-ground projects required of

watershed stewards to complete their certification.

The organization's advisory committee also includes the University of Maryland Extension in Howard County, the Center for Watershed Protection and the Howard County Legacy Leadership Institute for the Environment.

Another impetus for starting the academy is the fact that many people aren't aware of the direct connection between their properties' stormwater runoff and the bay, Huestis said.

Neighborhood storm drains, which control localized flooding from runoff, are often dumping sites for things like used motor oil, she said. And many people don't realize the pesticides and fertilizers they use can run off plants and lawns after a rainstorm and end up in those drains.

Rachel Beebe, stormwater aide in the county's environmental sustainability office, said the instruction really makes a deep impression on people.

"Once they get educated, they don't want to [apply fertilizers and pesticides] anymore," she said. "They learn they can tolerate a bug or two."

Beebe is also working with the county's "relatively new" residential watershed protection credit and reimbursement program for installing rain management techniques, she said. Eligible homeowners can apply for a one-time, lump-sum payment of up to 50 percent of their expenses, or for a 20 percent credit against the annual watershed protection fee.

The 64,000-square-mile Chesapeake Bay watershed into which local sub-watersheds eventually empty is the largest on the Atlantic seaboard and includes much of Virginia and Maryland, according to the group's website. It also includes parts of West Virginia, Delaware, Pennsylvania and New York, as well as all of Washington.

The Howard County Watershed Stewards Academy follows a five-step program that starts with identification of pollution sources. Subsequent steps range from creating pollution reduction strategies to installing projects that curb the stormwater volume infiltrating streams.

Terry Matthews, who was hired in December as part-time coordinator for the academy, said he will focus on finding grant money to accomplish the group's goals, and on helping the advisory committee build capacity.

"Howard County, in my mind, has done its homework," said Matthews, a Baltimore County resident.

"Now we need citizens to step up because we can't do it without them."

Huestis agreed, saying, "The success of this effort depends on individual people taking responsibility." The Howard County Watershed Stewards Academy will host an evening with Nicholas DiPasquale, director of the Environmental Protection Agency's Chesapeake Bay Program, from 7 p.m. to 9 p.m. Jan. 30 at the Howard County Conservancy, 10520 Old Frederick Road, Woodstock.

He will speak on what residents can do to clean their water, and there be opportunities to ask questions

and voice concerns.

Wis. bill would delay enforcement for industrial polluters if they helped reduce farm

**Outlet: Star Tribune - Online** 

GREEN BAY, Wis. — State Sen. Rob Cowles has introduced a bill designed to encourage industrial polluters to help pay to reduce farm pollution.

A Press-Gazette Media report says the Allouez (AL'-oh-way) Republican is concerned about oxygen-deficient areas in the waters of Green Bay.

Industrial sources are already cutting down on the amount of phosphorus they discharge into state waterways. Tougher government standards call for more cuts, but Cowles says those cuts will be expensive and only marginally helpful.

So he's proposing a bill that would allow industries to postpone their compliance with the new standards for 20 years. In exchange, the industries would pay to support county efforts to help farmers reduce manure reduction.

If Cowles' bill passes, it would still require approval from the U.S. Environmental Protection Agency.

City of Columbia facing tension over big-ticket projects, long-term debt

Outlet: State - Online, The

Many Columbia residents and City Hall leaders are wringing their hands over debt the city is facing because of a list of big-ticket projects that could approach \$1 billion over the next decade.

Neither the city's chief financial officer nor City Council members say Columbia is approaching a financial pinch like the one that socked the town seven years ago because of poor accounting methods.

"The city is very healthy in the eyes of the (municipal bond) rating agencies and the creditors," CFO Jeff Palen said Friday. "We are paying our bills timely." But the term "healthy," he added, is subject to individual interpretation.

Still, several council members interviewed say the financial risks are weighing on them, especially as council prepares to decide whether to invest public money to build a \$35 million minor-league baseball park in the proposed Bull Street neighborhood.

"I do not think, at this point, that we are overextended," said council's Budget and Finance Committee chairman, Cameron Runyan. "But I do think we have to be very careful."

Councilwomen Tameika Isaac Devine and Leona Plaugh and Councilman Moe Baddourah agree that

council must proceed cautiously.

Plaugh – who presents herself as council's fiscal conservative – recently told a crowd hostile to Bull Street spending: "It's probably nowhere near a correct statement that the city is broke."

Mayor Steve Benjamin is council's loudest cheerleader for the prospect of a stadium billed as being able to attract 500,000 visitors yearly downtown and to produce \$411.5 million in taxes, wages and spending, according to the city's feasibility study.

"We aren't even coming close to testing the city's fiscal limits," Benjamin said Friday in an email to The State newspaper. "The truth is that the city has \$400 million in treasury accounts and a AA-plus credit rating. Although so many folks love to try and present dire representations of the city's finances, those representations are not based in fact."

The city's long-term debt at the end of last fiscal year was \$513 million, down \$10.6 million from the previous year, according to the auditor's comment in the just-released annual audit.

Despite the \$513 million debt figure, listed in the audit's "financial highlights" section, deep inside the 131-page document, the auditors presented a chart labeled "Detailed notes on all activities and funds."

In that chart, the city's "total long-term obligations" figure is \$589 million – which is \$76 million higher than \$518 million.

Palen said the \$589 million reflects \$76 million in additional obligations attributable to bond premiums and other costs, including obligations to future retirees – which are not contained within the \$513 million long-term debt figure.

The debt translates to \$3,891 for each person living in the city, the audit shows. That per capita figure is down by \$125 from last year's \$4,015.

Palen said the per capita figure is misleading because it does not capture the large numbers of water and sewer service customers who live outside of city limits who pay toward the system's debt. He did not have a more refined number available.

The audit covers the 12 months between July 1, 2012, and June 30, 2013, and represents the most recent financial data to be verified by a private accounting firm, in this case WebsterRogers.

The city's spending rose by \$7 million, or 2.6 percent, over the previous year, the audit shows. Total spending reached \$279.5 million.

"The city's overall financial position improved and net position increased by \$31,008,436, or 3.86 percent, during the fiscal year ended June 30, 2013," the audit states. "This increase is primarily the result of a 5 percent increase in water rates and a one-time gain of approximately \$11 million resulting from the sale of a portion of the city's sewer system."

Still, residents and council members worry about facing new expenses.

The 800-pound gorilla is the \$750 million projected cost of fixing Columbia's sewer system, which is under a federal directive to stop pollution spills.

The city began pumping more money into sewer repairs four years ago, before the U.S. Environmental Protection Agency directive was disclosed last year, said utilities director Joey Jaco. Already, the city has met \$160 million of the \$750 million investment commitment, he said.

The focus of fiscal watchdogs last week was on whether residents can afford a \$90 million-plus investment in the stadium and the city's commitment to the Bull Street neighborhood, now called Columbia Commons, where the ballpark would be constructed.

Devine said she's weighing the financial risks against the likelihood that a year-round ballpark that also would serve as an outdoor concert and community events venue will give the city an exciting new attraction, especially for young adults.

If the city doesn't foot most of the cost, "Are we potentially going to lose a major attraction?" she said.

The rest of the city's expensive to-do list also includes:

- About \$40 million annually to maintain the water system, a council commitment.
- About \$9 million to \$10 million to refurbish Finlay Park, which has yet to receive a vote from council.
- Undisclosed sums to upgrade public safety, including hiring more police officers and raising pay for them, firefighters and 911 dispatchers.
- Undisclosed sums to conduct and carry out a study that would evaluate all 2,300 city jobs and determine how to adjust employees' pay, to consolidate positions or to cut the workforce.

Columbia's primary sources of income are its water and sewer systems, property taxes, business licenses/other permit fees and the 2 percent tax on prepared meals and beverages, commonly called a "hospitality tax."

Revenue from the utility system grew to \$121.6 million, up \$9 million over the previous fiscal year, a comparison by the newspaper of the previous-year audit shows.

It cost \$96.8 million to operate the system during the new-audit period, the figures show.

Property tax collections, however, dropped by \$3.5 million to \$47 million, the current audit shows. Palen said that about \$15 million of the \$47 million comes from the local option sales tax – not directly from property owners' pockets.

Fees from business licenses and other municipal permits amounted to \$30.5 million, up \$2.2 million, largely because the city increased the fees.

Meal-tax income rose to \$9.5 million, up by \$665,000, as the economy began to improve from the Great Recession.

The city's biggest fiscal engine is the water and sewer systems – mostly the water system, which is cheaper to operate and therefore more profitable.

The audit states the system is valued at \$967 million. It has \$431.9 million in liabilities, of which \$376.5 million is owed to repay revenue bonds. That means liabilities amount to almost 45 percent of the system's value, audit figures show.

Moody's Investors Service reported in September that the debt ratio for Columbia's system is "above average" at 49.5 percent at the end of the previous fiscal year.

"The city faces a choice of allowing debt service coverage to decline as a result of the new (\$750 million) debt, or passing on the full incremental cost of the new debt to customers through rate increases," Moody's wrote late last summer.

Benjamin said Friday that Standard & Poor's improved Columbia's credit rating even after the city made its commitment to Bull Street, after the settlement with the EPA, after council approved an across-the-board pay raise for employees last year and after it announced the job-analysis study.

The \$11 million sale of the sewer system northwest of the city gave Columbia's coffers for water and sewer a one-time injection of income. Often, those systems require a lot of upkeep, which means greater expenses.

That sale and other accounting moves resulted in a \$25 million infusion, including \$5.8 million worth of underground pipes that developers turned over to the city to operate, audit figures show.

Devine said that an additional \$25 million generated from last year's rate increase was supposed to be spent on the utility system. But some was redirected. Devine did not say where the money went.

Further, council authorized moving \$6.8 million out of the system into Columbia's general fund – the account used to pay most city expenses, Palen said. The general fund also received \$4.1 million of the \$9.5 million the city received from meal and beverage taxes.

Critics say that in moving money from various pots into the general fund, council is making that account look better on the city's books by robbing Peter to pay Paul.

Council has yet to discuss a new round of water and sewer rate increases. That's likely to occur in the spring.

The sewer portion of the system is in such bad shape from years of neglect that Columbia has reached the agreement with the EPA that triggers much more spending. The agreement has yet to be finalized, Jaco said.

The EPA has not imposed a strict deadline for completing the replacements and repairs of underground lines and sewage treatment facilities. But the city has set itself a 10-year timetable. That allows the city financing options in smaller chunks rather than borrowing large sums all at once.

But as Runyan points out, interest rates are at nearly historic lows, and waiting may raise financing costs.

In the meantime, he and Devine said, water and sewer rates will have to rise. But neither would say by how much.

"For too long, they kept the rates artificially low because of the political risk," Runyan said of previous councils. "This is not a revelation. It is the politics of running the system that got us into this fix.

"What they were doing was borrowing against the future. At some point, you've got to pay that."

Runyan said he is studying whether to propose a water and sewer authority that would remove rate-making decisions from council to minimize political considerations.

Columbia's financial picture

A just-released city audit\* shows Columbia on a firm footing. But long-term debt is weighing on City Council members and taxpayers as \$750 million sewer system improvements, Bull Street commitments and other big-ticket projects loom.

Long-term debt: \$513 million, down \$10.6 million from the previous fiscal year

City spending: \$279.5 million, up \$7 million or 2.6 percent

Water and sewer income: \$121.6 million, up \$9 million

Water and sewer debt ratio: \$967 million is the value of the system. It has \$431.9 million in liabilities, which amounts to almost 45 percent of the value.

Property tax collections: \$47 million, down by \$3.5 million

Business license/permit fee: \$30.5 million, up \$2.2 million

Meal-tax income: \$9.5 million, up \$665,000

\* The verified audit covers the fiscal year between July 1, 2012, and June 30, 2013